

Remarks:

Reconsideration of the application is requested.

Claims 14 to 31 remain in the application.

In the first paragraph on page 2 of the above-identified Office action, the Examiner objected to claim 25 by stating that the wording of claim 25 is the same as claim 24.

Claim 24 provides:

said central switching unit has a collision resolution unit for using a prescribed specification to create a fairest possible authorization information item during a condition in which a plurality of said port units at the same time contain at least one data packet or cell available for transmission to the same other one of said port units.

Claim 24 does not mention where the collision resolution unit is with respect to the central switching unit. Claim 25 provides:

said collision resolution unit is integrated in said central switching unit.

In contrast to claim 24, claim 25 clearly describes a relative location of the collision resolution unit and the central switching unit - that the former is "integrated in" the latter. Thus, claim 25 is narrower than claim 24.

Accordingly, applicants respectfully traverse the objection to claim 25.

On pages 2 to 3 of the above-identified Office action, claims 14 to 26, 28, and 30 have been rejected as being indefinite under 35 U.S.C. § 112, first paragraph. More specifically, the Examiner states: that "the specification does not support 'availability request information.'"

Applicants respectfully believe that sufficient support exists in the specification for the "availability request information" set forth in the claims. one having ordinary skill in the art would know from a reading of the specification of the instant application that the "availability information" is "availability request information."

Support for this conclusion is first found on page 4 beginning on line 21. Therein, it is described that according to the invention, "the way in which the contention resolution function is produced is in that the port units transmit availability information to the central switching unit, the availability information indicating to which of the other port units at least one data packet or cell needs to be

transmitted. The central switching unit evaluates the availability information and uses a prescribed specification (contention resolution algorithm) to ascertain authorization information indicating from which port units (transmitting port units) a respective data packet or cell can be transmitted to which other port units (receiving port units) in the next step or in a particular one of the next steps without blocking occurring."

Thus, the specification describes that availability request information is contained in the availability information and is used to ascertain authorization information for transmission.

On page 16, line 13 et seq. of the specification, it is described that "the availability information can be combined in the form of a contention request vector (CRreq)." In contrast to what the Examiner states, this "contention request vector" is not a combination of an "availability information" item. Instead, the availability information according to a preferred embodiment of the invention is in the form of a contention request vector (CRreq). See page 16, lines 7 to 11, of the specification of the instant application.

Hence, it is apparent for a person skilled in the art that the

"availability information" as used in the specification includes plain availability information as well as a request. According to the specification at page 17, lines 4 et seq., "the central switching unit 5 or interface units Port IF read out the availability information contained in each of these cells and transmit it to the CR unit 8 [contention resolution unit], together with the information item about which port unit has transmitted the availability information. The CR unit 8 uses a prescribed contention resolution algorithm to ascertain a respective possible combination of permissible, i.e. collision free, transmission options from appropriate transmitting port units to appropriate receiving port units." The combination ascertained in this way is transmitted in the form of authorization information item CRgnt at least to those port units that are intended to receive transmission authorization for the relevant time slot.

It is, thus, undoubtedly clear that the "availability information" contains a request and could, therefore, be defined as "availability request information" as set forth in claims 14 to 26, 28, and 30. Thus, the feature is adequately described in the specification of the instant application.

It is accordingly believed that the specification and the claims meet the requirements of 35 U.S.C. § 112, first paragraph.

On pages 3 to 6 of the above-identified Office action, claims 14, 15, 20 to 22, 24, 26 to 29, and 31 have been rejected as being indefinite under 35 U.S.C. § 112, second paragraph.

On the bottom of page 3, with regard to claims 14, 21, 22, 24, 26, 26, 28, and 29 the Examiner is unclear as to the meaning of "port units." It is respectfully believed that the "plurality of port units" is used first in the claims and a shortened version "port units" is used thereafter. By eliminating unnecessary and repeated instances of "plurality of," there is greater efficiency in a length of the claims. Thus, there is only one set of port units.

On the top of page 4, the Examiner indicates a belief that various phrases are unclear in claims 14, 16, 18, 21, 22, 24, 26, 26, 28, and 29. As there is only one set of port units, it is respectfully believed that the cited claim language is clear and need not be amended.

In the second full paragraph on page 4, the "steps" referred to in the phrase "recombining the cells received in a

plurality of steps into data packets" means that the cells are received in steps.

With regard to claims 28 and 29 on page 4, the "information" referred to is the "respective information item" set forth earlier in the respective text of claims 28 and 29.

With regard to claims 14, 15, 21, and 22, applicants have provided that the signal has "data packets" in claims 14, 21, and 22. Thus, antecedent basis exists for "each data packet" in claims 14, 21, and 22. **These changes also address the rejection in the first full paragraph on page 5 with respect to claims 14, 21, and 22.**

With regard to claim 31, the claim is dependent upon claim 27, which is dependent upon claim 23, which is dependent upon claim 14. Claim 31 contains the phrase "the authorization information." This phrase finds antecedent basis in part (f) of claim 14.

With regard to the rejection of claims 14, 21, and 22 on page 5, third full paragraph, "the availability request information" has antecedent basis and support as set forth in the response to the Section 112, first paragraph rejection and is, therefore, incorporated herein by reference.

The Examiner also rejects claims 14, 21, 22, 28, and 29 because of the phrases "in steps" or "a next step" or "a particular one of next steps." The Examiner appears to take the patent definition of the word "step" in these phrases, in that, method claims are made up of method steps. Claim 14, however, uses the word "step" in another way. Specifically, it is used as it appears in the phrase "carrying out signal transmission between the port units and the central switching unit in steps by transmitting data blocks." A signal transmission can be carried out continuously, for example, and can be carried out "in steps." In claim 14, the "in steps" does not take on the meaning placed thereupon by the Examiner. This definition equally applies to the "next step" mentioned in the phrase in part (f) of claim 14: ". . . from which port units a respective data packet or cell can be transmitted to a different port unit in a next step or in a particular one of [a plurality of] next steps without an occurrence of blocking." The "steps" referred to in part (i) of claim 14: ". . . recombining the cells received in a plurality of steps into data packets and outputting the data packets through the relevant ports" also relates to the cells that were received in steps. It is respectfully submitted that the word "steps" mentioned in the claims should be given the meaning that one having ordinary skill in the art would attribute to the word

Applic. No. 09/627,179

Response Dated June 30, 2004

Responsive to Office Action of March 30, 2004

based upon a reading of the specification of the instant application.

The Examiner also rejections claims 14, 21, and 22 based upon the words "the data packet." Item (c) of claim 14 provides: "ascertaining with each port unit an address information item for each data packet supplied to at least one port of each port unit and using the address information item to determine a receiving port unit to which the data packet will be transmitted, each port unit storing, in a buffer memory associated with the receiving port unit, the data packet as a whole or segmented into a plurality of cells." "[E]ach data packet" in item (c) is mentioned after introducing the data packets in item (a) and "the data packet" thereafter mentioned in item (c) refer to the data packet in the phrase "each data packet." Therefore, a data packet is disclosed in the claims and each of the cited phrases have proper antecedent basis. It is respectfully submitted that the phrase "each data packet" can be read to be the same as "each of the data packets" but use of this language would make the remaining part of item (c) very awkward in English. The same is true for claims 21 and 22.

Finally, on page 6, second full paragraph, the Examiner rejects claims 14 and 21 because of the use of the phrase

"data packets or cells." It is respectfully believed that this phrase is used consistently in item (h) of claims 14 and 21 and is, thereafter always used in its entirety in items (h) and (i) of claims 14 and 21.

It is accordingly believed that the specification and the claims meet the requirements of 35 U.S.C. § 112, second paragraph.

On pages 6 to 7 of the above-identified Office action, claim 23 has been rejected as being fully anticipated by Cordell (U.S. 5,367,520) under 35 U.S.C. § 102.

As will be explained below, it is believed that claim 23 was patentable over the cited art in its original form and, therefore, it has not been amended to overcome the reference.

In claim 23, it is described that the availability information can be combined in the form of a contention **request** vector. (Crreq), which, in this context, is an availability request information (see arguments with regard to the Section 112 rejection, which are incorporated herein).

In the present invention, the availability request information contains the request for those other port units having cells

for transmission in the respective "requesting" port unit."

The method and system for routing cells in and ATM switch according to Cordell, in contrast, does not use such an availability request information. Accordingly, Cordell cannot be said to anticipate claim 23, and this rejection is now moot.

On pages 7 to 16 of the above-identified Office action, claims 14, 16, 20, 22, and 24 have been rejected as being obvious over Cordell in view of Cai et al. (U.S. 6,134,246; hereinafter "Cai") under 35 U.S.C. § 103.

In addition to Cordell, Cai also fails to disclose or suggest the availability request information of claims 14, 16, 20, 22, and 24. According to the present invention, prior to the transmission of cells, a request is started and the issuance of an authorization information item CRgnt is awaited (see page 17, lines 16 to 19) until the predetermined cells are transmitted without the occurrence of a blocking or congestion. Thus, Cai and Cordell do not even relate to the subject matter of the present invention.

It is well settled that almost all claimed inventions are but novel combinations of old features. The courts have held in this context, however, that when "it is necessary to select

elements of various teachings in order to form the claimed invention, we ascertain whether there is any suggestion or motivation **in the prior art** to make the selection made by the applicant". Interconnect Planning Corp. v. Feil, 227 USPQ 543, 551 (Fed. Cir. 1985) (emphasis added). "Obviousness can not be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination". In re Bond, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990). "Under Section 103 teachings of references can be combined **only** if there is some suggestion or incentive to do so." ACS Hospital Systems, Inc. v. Montefiore Hospital et al., 221 USPQ 929, 933, 732 F.2d 1572 (Fed. Cir. 1984) (emphasis original). "Although a reference need not expressly teach that the disclosure contained therein should be combined with another, the showing of combinability, in whatever form, must nevertheless be 'clear and particular.'" Winner Int'l Royalty Corp. v. Wang, 53 USPQ2d 1580, 1587, 202 F.3d 1340 (Fed. Cir. 2000) (emphasis added; citations omitted); Brown & Williamson Tobacco Corp. v. Philip Morris, Inc., 56 USPQ2d 1456, 1459 (Fed. Cir. Oct. 17, 2000). Applicants believe that there is no "clear and particular" teaching or suggestion in Cai to incorporate the features of Cordell, and there is no teaching or suggestion in Cordell to incorporate the features of Cai.

In establishing a *prima facie* case of obviousness, it is incumbent upon the Examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion, or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the applicants' disclosure. See, for example, Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir. 1988), cert. den., 488 U.S. 825 (1988). The Examiner has not provided the requisite reason why one of ordinary skill in the art would have been led to modify Cordell or Cai or to combine Cordell's and Cai's teachings to arrive at the claimed invention. Further, the Examiner has not shown the requisite motivation from some teaching, suggestion, or inference in Cordell or Cai or from knowledge available to those skilled in the art.

Applicants respectfully believe that any teaching, suggestion, or incentive possibly derived from the prior art is only present with hindsight judgment in view of the instant application. "It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using

Applic. No. 09/627,179

Response Dated June 30, 2004

Responsive to Office Action of March 30, 2004

the applicant's structure as a template and selecting elements from references to fill the gaps. . . . The references **themselves** must provide some teaching whereby the applicant's combination would have been obvious." In re Gorman, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (emphasis added). Here, no such teaching is present in the cited references.

Even if one skilled in the art were to combine Cordell and Cai, there would be no way to result, from such a combination, in the non-suggested step of sending out an availability request information that is responded to by and authorization information as set forth in independent claims 14 and 21.

Considering the above-mentioned deficiencies of Cordell and Cai with regard to claim 14, and the fact that claims 15, 18, and 19 ultimately depend on claim 14, it is believed not to be necessary at this stage to address the tertiary reference Díaz (U.S. 5,361,255) applied in the rejection of claims 15, 18, and 19 on pages 16 to 18 of the Office action, and whether or not there is sufficient suggestion or motivation with a reasonable expectation of success for modifying or combining the references as required by MPEP § 2143.

Considering the above-mentioned deficiencies of Cordell and Cai with regard to claim 14, and the fact that claim 17

ultimately depends on claim 14, it is believed not to be necessary at this stage to address the tertiary reference Kozaki et al. (U.S. 5,184,346) applied in the rejection of claim 17 on page 19 of the Office action, and whether or not there is sufficient suggestion or motivation with a reasonable expectation of success for modifying or combining the references as required by MPEP § 2143.

Considering the above-mentioned deficiencies of Cordell and Cai with regard to claims 21 and 22, and the fact that claims 26 and 30 ultimately depend on claim 22, it is believed not to be necessary at this stage to address the tertiary reference Papierniak et al. (U.S. 5,825,751) applied in the rejection of claims 21, 26, and 30 on pages 20 to 24, and whether or not there is sufficient suggestion or motivation with a reasonable expectation of success for modifying or combining the references as required by MPEP § 2143.

Considering the above-mentioned deficiencies of Cordell and Cai with regard to claim 14, and the fact that claims 27 and 31 ultimately depend on claim 14, it is believed not to be necessary at this stage to address the tertiary reference Papierniak et al. (U.S. 5,825,751) applied in the rejection of claims 27 and 31 on pages 24 to 25 of the Office action, and whether or not there is sufficient suggestion or motivation

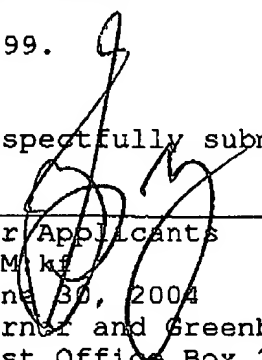
with a reasonable expectation of success for modifying or
combining the references as required by MPEP § 2143.

It is accordingly believed to be clear that none of the
references, whether taken alone or in any combination, either
show or suggest the features of claims 14 through 31. In view
of the foregoing, reconsideration and allowance of claims 14
to 31 are solicited.

In the event the Examiner should still find any of the claims
to be unpatentable, counsel would appreciate receiving a
telephone call so that, if possible, patentable language can
be worked out.

If an extension of time for this paper is required, petition
for extension is herewith made. Please charge any other fees
that might be due with respect to Sections 1.16 and 1.17 to
the Deposit Account of Lerner and Greenberg, P.A., No. 12-
1099.

Respectfully submitted,



For Applicants
GLM/kf
June 30, 2004
Lerner and Greenberg, P.A.
Post Office Box 2480
Hollywood, FL 33022-2480
Tel: (954) 925-1100
Fax: (954) 925-1101

Gregory L. Mayback
Reg. No. 40,719